

United States Patent and Trademark Office

TO

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,892	09/22/2003	Geoff D. Koch	082380-00564	8201
7590 05/06/2005		EXAMINER		
Sean V. O'Connell, Esquire			NEUDER, WILLIAM P	
McKinney & Str	ringer, P.C.			
Suite 1300			ART UNIT	PAPER NUMBER
101 North Robinson			3672 .	
Oklahoma City, OK 73102			DATE MAILED: 05/06/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/667,892	KOCH ET AL.				
Office Action Summary	Examiner	Art Unit				
	William P Neuder	3672				
The MAILING DATE of this communication appeared for Reply	ppears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPI THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reg - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tin ply within the statutory minimum of thirty (30) day d will apply and will expire SIX (6) MONTHS from te, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
2a) This action is FINAL . 2b) ⊠ Th	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-10 is/are pending in the application 4a) Of the above claim(s) is/are withdress. 5) Claim(s) is/are allowed. 6) Claim(s) 1,5,6 and 8 is/are rejected. 7) Claim(s) 2-4,7,9 and 10 is/are objected to. 8) Claim(s) are subject to restriction and/	awn from consideration.					
Application Papers						
9) The specification is objected to by the Examir	ner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the corre						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the priority application from the International Bure: * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicati ority documents have been receive au (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/06) Paper No(s)/Mail Date 2/2/04.	4) Interview Summary Paper No(s)/Mail Do 8) 5) Notice of Informal F 6) Other:					

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,5 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Tracro-Technik.

Tracto-Technik discloses a makeup/breakout assembly for use with a horizontal drilling machine (see figure 1). Pipe sections 6,8,10 make up a drill string. The pipe sections are connected at threaded ends by use of a spindle. A rotation drive 1 is mounted to a drive frame 2. Rotation shaft 3 is driven by the rotation drive. The rotation shaft is characterized by an amount of axial float (Delta X). A biasing means 30 is positioned to urge the rotation shaft to a center position. Float sensors 22,24 are used to determine the amount of float and transmitter 20 transmits the information to a control 26. Controller 26 receives the signal and coordinates thrust and rotation in response to the signals. As to claim 5, the controller automatically controls the thrust and therefore limits the amount of thrust to a predetermined value. As to claim 8, the automatic controller calculates the amount of thrust based on the information from the float sensors.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tracto-Tachnik. Application/Control Number: 10/667,892 Page 4

Art Unit: 3672

The exact amount of thrust set as the upper limit would have been considered arrived at by routine experimentation and therefore would have been considered an obvious design choice.

Allowable Subject Matter

Claims 2-4,7,9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P Neuder whose telephone number is 571-272-7032. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William P Neuder Primary Examiner Art Unit 3672